

## Exhibit 300: Capital Asset Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

**Date Investment First Submitted:** 2009-06-30  
**Date of Last Change to Activities:** 2012-08-28  
**Investment Auto Submission Date:** 2012-02-29  
**Date of Last Investment Detail Update:** 2012-02-29  
**Date of Last Exhibit 300A Update:** 2012-05-29  
**Date of Last Revision:** 2012-08-28

**Agency:** 020 - Environmental Protection Agency      **Bureau:** 00 - Agency-Wide Activity

**Investment Part Code:** 01

**Investment Category:** 00 - Agency Investments

**1. Name of this Investment:** CDX - Central Data Exchange

**2. Unique Investment Identifier (UII):** 020-000016005

#### Section B: Investment Detail

- 1. Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

CDX is the electronic gateway for environmental data entering the Agency and serves as EPA's Node on the Environmental Information Exchange Network (EN). CDX enhances the timeliness, quality and availability of data for EPA programs and their stakeholders. CDX replaces 60 different independent data collection processes at EPA with a single interface for the exchange of environmental data. CDX makes information more accessible and offers customers fast, easy, and secure electronic reporting features. It enables automated, machine-to-machine transactions, eliminating redundant data entry that can lead to reporting errors; ensures a secure electronic environment for transactions; improves quality through built-in quality checks; offers faster, easier reporting with a consistent point of entry for reporting; and distributes data to the appropriate recipient data system. EPA works with states to exchange environmental data via the EN to reduce the burden of environmental reporting and improve data quality. CDX's beneficiaries include numerous EPA programs and stakeholders benefiting from expanded information access, enhanced data quality, and reduced costs. CDX is EPA's designated system for complying with the Cross-Media Electronic Reporting Regulation (CROMERR) by providing compliant solutions for information exchange and is a primary component of EPA's Enterprise Architecture. CDX interfaces with other federal electronic systems like Grants.gov and Pay.gov, and the technology has been a model for other federal activities like FederalReporting.gov and USDA data exchanges. 2013

funding will allow CDX to expand capacity, implement new data flows, perform maintenance on existing data exchanges and nodes, and conduct R&D to further reduce the cost of electronic data exchange. The CDX team is also planning to support reporting of toxic chemical information, fuel additives and data exchange activities on global climate change activities that span across all EPA media programs. Investments dependent on CDX include: EMTS, RadNET, Verify, EPASS, IGMS, ICIS, FRS, TRI-Meweb, ACRES, RCRAInfo, eBEACHES, eNOI, SDWARS, and UIC.

**2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

CDX supports the EPA Administrator's strategic goals by reducing costs through its data exchange infrastructure, improving data timeliness and quality, and expanding access to information for EPA programs and their stakeholders. CDX makes information more accessible and offers customers fast, easy, and secure electronic reporting features. CDX's priorities map directly to the Administrator's priorities, which include: taking action on climate change and improving air quality through greenhouse gas reporting and the Air Quality System; protecting America's waters through the Safe Drinking Water Information Systems and Water Quality Exchange; cleaning up communities through the Underground Injection Control and Resource Conservation and Recovery Act Information Systems; leveraging eTSCA Reporting, TRI Reporting, and the Risk Management Plan System to ensure the safety of chemicals; enforcing environmental laws with the support of ICIS-NPDES, IDEF, R6 eDisclosure, eNOI/eNOT, and EPCRA eDisclosure data flows; and strengthening state, tribal, and international partnerships via EN shared services on CDX. CDX supports the Administrator's priorities directly through its expanding data flows and services. For example, through the electronic greenhouse gas reporting tool (eGGRT) GHG reporting, which opened facility/user registration in December 2010, facilities will submit emission reports to EPA electronically and utilize CDX registration, authentication, and CROMERR services. Failing to fully fund this investment will significantly impact the EPA programs, stakeholders, and services that are dependent upon CDX, including over 50,000 active CDX users, 60 existing data flows, and an additional 10 data flows currently under development. Any reduction to existing or proposed functionality will result in redundant and contrasting data exchange infrastructure and its associated costs. In addition, if CDX is not fully funded, the inability to submit and process vital data submissions and reports will have potentially catastrophic consequences affecting EPA, the environment, and the greater public. Any reduction in funding will have serious implications on CDX operations and will greatly increase the burden to the regulated community in the U.S.

**3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

Prior year (PY) accomplishments: 1) Completed major upgrades and enhancements to increase capacity, minimize downtime, ensure efficient data flow, enhance security, provide support for service-based technology, improve user-account management, upgrade database servers, virtualize the entire CDX environment, and expand CDX's ability to receive and process requests; 2) Implemented or upgraded eight CDX data flows using more streamlined development processes (CDX-lite) resulting in dramatic cost and schedule savings; 3)

Expanded CDX to include 60 data flows in production and more than 50,000 active users; 4) Introduced a new identity-proofing process that reduces the cost to register users from \$30.00 to \$0.06; 5) Maintained a high level of customer satisfaction; 6) Started developing a cloud strategy for CDX/EN; 7) Served as EPA's confidential business information (CBI)-recognized service provider.

**4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

Current year (CY) planned accomplishments: The CDX team plans to perform maintenance on existing data exchanges, assess and evaluate CDX strategic design and operations, update applicable plans, and maintain state and tribal nodes for multiple delegated programs. In addition, EPA, through CDX, plans to develop services and provide a governance framework to support an open platform system that would be available to any commercial software vendor that would want to offer a Federal electronic reporting service to its client. The initial step will be to develop the EN services via an eFile data exchange needed for CDX to support the NPDES Program reporting (i.e., e-Discharge Monitoring Reports (DMRs), e-Notices of Intent (NOI), program reports). Activities include: establishing the government framework and process, defining data delivery protocols and technical specifications, communicating and coordinating with vendors, expanding existing/developing new exchange services, performing collection-specific testing, ensuring sound security, coordinating testing and production, and providing O&M. Budget year (BY) planned accomplishments: In BY 2013, CDX Next Generation Architecture will be implemented, which includes implementation of new technology and cloud computing where applicable. The CDX team anticipates implementing business process and service improvements and Information Technology Infrastructure Library (ITIL) best practices for improved IT service management and business alignment. New data flows including ACE and eFile reporting will also be implemented. In addition, the CDX team plans on performing ongoing O&M activities for existing data flows, system upgrades, and research and analysis of new technologies and processes.

**5. Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2011-09-16

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$24.6	\$2.3	\$1.7	\$0.0
DME (Excluding Planning) Costs:	\$23.3	\$2.8	\$5.9	\$9.0
DME (Including Planning) Govt. FTEs:	\$0.4	\$0.5	\$0.8	\$0.8
Sub-Total DME (Including Govt. FTE):	\$48.3	\$5.6	\$8.4	\$9.8
O & M Costs:	\$50.5	\$4.9	\$4.9	\$5.0
O & M Govt. FTEs:	\$10.9	\$1.8	\$0.9	\$0.9
Sub-Total O & M Costs (Including Govt. FTE):	\$61.4	\$6.7	\$5.8	\$5.9
Total Cost (Including Govt. FTE):	\$109.7	\$12.3	\$14.2	\$15.7
Total Govt. FTE costs:	\$11.3	\$2.3	\$1.7	\$1.7
# of FTE rep by costs:	86	15	11	10
Total change from prior year final President's Budget (\$)		\$0.0	\$0.0	
Total change from prior year final President's Budget (%)		0.00%	0.00%	

**2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:**

## Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	6800	<a href="#">EP09H001056</a>	GS06F0399Z	4730							
Awarded	6800	<a href="#">0002</a>	EPW11018	6800							
Awarded	6800	<a href="#">EP1518</a>	GS35F4797H	4730							
Awarded	6800	<a href="#">0002</a>	EPW11012	6800							
Awarded	6800	<a href="#">EP09H002174</a>	GS35F0005T	4730							

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

# Exhibit 300B: Performance Measurement Report

## Section A: General Information

**Date of Last Change to Activities:** 2012-08-28

## Section B: Project Execution Data

**Table II.B.1 Projects**

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
16005A	CDX FY2012 Planning	Assess and evaluate CDX strategic design and operations.			
16005B	CDX FY2012 Development	Develop new CDX data exchanges and implement improvements/enhancements.			

**Activity Summary**

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M)	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
16005A	CDX FY2012 Planning							
16005B	CDX FY2012 Development							

**Key Deliverables**

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
16005A	CDX Strategic	Update CDX strategic	2012-03-31	2012-03-31	2012-03-31	182	0	0.00%

## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
	Documentation, Support Plans, & Analysis Stage 1	and support plans, including acquisition, architecture, CPIC, mitigation, risk, security, service catalog and other documentation as necessary to reflect latest CDX strategic design and operations.						
16005B	Research & Development Stage 1	Research and develop potential CDX enhancements, including automated and standardized processes.	2012-03-31	2012-03-31	2012-03-31	182	0	0.00%
16005A	CDX Strategic Documentation, Support Plans, & Analysis Stage 2	Develop supporting documentation for latest strategic planning initiatives, including cloud analysis.	2012-09-30	2012-09-30		182	0	0.00%
16005B	Research & Development Stage 2	Research and develop potential CDX enhancements, including automated and standardized processes.	2012-09-30	2012-09-30		182	0	0.00%

Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Customer Satisfaction Survey Score (average customer satisfaction survey responses of a subset of users where 1 is exceptionally dissatisfied and 6 is exceptionally satisfied).	Number	Customer Results - Customer Benefit	Over target	5.500000	5.600000	5.600000	5.700000	Quarterly
Customer support services (average customer satisfaction survey responses based on limited subset of users where 1 is exceptionally dissatisfied and 7 is exceptionally satisfied).	Number	Customer Results - Service Quality	Over target	6.000000	6.100000	6.300000	6.200000	Quarterly
Number of production data flows from EPA, State, Tribal, and Industry users that have completed development and have been authorized to have their data flows and code migrated to the CDX production environment.	Number of Production Data Flows	Technology - Information and Data	Over target	59.000000	60.000000	59.000000	61.000000	Quarterly
Timeliness of Data (average survey responses from limited subset of users where 1 is exceptionally	Number	Process and Activities - Cycle Time and Timeliness	Over target	5.500000	5.600000	5.500000	5.700000	Quarterly

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
dissatisfied and 6 is exceptionally satisfied).								
Information Quality (survey responses from subset of users where 1 is exceptionally dissatisfied and 6 is exceptionally satisfied)	Number	Technology - Information and Data	Over target	6.000000	6.000000	5.600000	6.000000	Quarterly
Percent Availability of CDX Services (during operational hours).	Percentage	Technology - Reliability and Availability	Over target	98.200000	98.400000	99.250000	98.600000	Monthly